### BURNT FLY BOG NEW JERSEY

EPA ID# NJD980504997



# EPA REGION 2 CONGRESSIONAL DIST. 12

Monmouth County and Middlesex County Marlboro Township

### **Site Description**

Burnt Fly Bog is located in a semi-rural area and covers about 1,700 acres, mostly in Marlboro Township, Monmouth County, but extending into Old Bridge Township in Middlesex County. It is located on the periphery of the New Jersey Pine Barrens. An auto salvage yard, a few scattered residences, and a horse farm are located nearby. Contamination of a portion of the Bog began during the 1950s and the early 1960s, with the direct dumping and spreading of hazardous materials resulting from recycled waste oil operations. The area of contamination was later designated as a Superfund site, which became known as the Burnt Fly Bog Superfund site. The Burnt Fly Bog site is divided into two major areas of contamination, namely, the Uplands Area and the Westerly Wetlands. In the portion referred to as the Uplands Area, lagoons were constructed and used to store reprocessed waste oil. Under several owners, these facilities were allowed to degenerate, leaving several waste oil lagoons containing residual oil sludges and aqueous wastes, contaminated waste piles, drummed wastes, and areas of contaminated soil resulting from associated waste oil reprocessing activities. In addition to the oil reprocessing activities, the site was also the former location of a landfill and dump, located north of the Uplands Area. Uncontrolled discharges from the Uplands Area waste sources have resulted in surface water and soil contamination moving downstream into the adjoining Westerly Wetlands. The Westerly Wetlands is located in a groundwater discharge area of the Englishtown Aquifer, where groundwater flows to the surface and ultimately drains into Deep Run via Burnt Fly Brook. The nearest people are located about 1,000 feet away from the site and the nearest well is 200 feet away. Streams and wetlands drain the site and surface water is used for recreation

#### Site Responsibility:

This site is being addressed through Federal and State actions.

#### **NPL LISTING HISTORY**

Proposed Date: 10/01/81 Final Date: 09/01/83

#### Threats and Contaminants





Soils and sediments contain polychlorinated biphenyls (PCBs) and lead. People may come into contact with site contaminants by accidentally ingesting polluted soils or dusts; eating fish, wild berries, or wild game from the Bog; or, potentially, by inhaling the toxic products of burning PCBs from a fire such as occurred on the site in 1973. The site is located in a fringe area of the environmentally sensitive New Jersey Pine Barrens.

### Cleanup Approach

The site is being addressed in four stages: immediate actions and three long-term remedial phases focusing on cleanup of the Uplands Area and the Westerly Wetlands.

#### Response Action Status -



**Immediate Actions:** In 1982, EPA repaired an earthen dike which the State had built in the Uplands Area to hold back lagoon contents. EPA also installed a security fence around the lagoons and drums to restrict access. Construction of a dike and security fence around the

lagoons and drums, and the removal and disposal of the contaminated soils and sludge in the Uplands Area, have greatly reduced the potential for accidental contact with hazardous materials and for contaminated liquids to migrate from the site.



**Uplands Area:** EPA selected a remedy to clean up the Uplands Area (referred to as Operable Unit #1) in November 1983. It included: (1) excavating hazardous substances in lagoon 1, the asphalt pile area, the tar patch area, and the drummed waste area - and disposing of them at EPA-

approved off-site facilities; (2) excavating and removing hazardous materials in lagoons 2, 3, and 4; (3) excavating and removing contaminated soil in other areas for off-site disposal; (4) excavation and removal of sludge contaminated with high levels of PCBs for off-site incineration; (5) restoring the original site contours and replanting the area; (6) designing a comprehensive five-year groundwater monitoring program and testing eight residential wells; and (7) studying the Westerly Wetlands further to determine the extent of contamination there. Work on the Uplands Area was completed in 1993.



**Westerly Wetlands:** In September 1988, EPA selected an Interim Remedy for the Westerly Wetlands area (referred to as Operable Unit #2). It included: (1) excavating approximately 6,000 cubic yards of contaminated materials that migrated through the Westerly Wetlands to the

Downstream Area; (2) disposing of these materials in the same manner in which Uplands Area wastes were handled; (3) containing the contaminated soil and sediment in the Westerly Wetlands by means of a sedimentation basin and appropriate diversion controls; and (4) installing security fencing and constructing an access road into the Westerly Wetlands from Spring Valley Road.

The New Jersey Department of Environmental Protection (NJDEP) completed an engineering design for the Interim Remedy in March 1995. Construction of the Interim Remedy was initiated in late 1995 and completed at the end of December 1996.



**Final Remedy:** In September 1998, EPA selected the Final Remedy (referred to as Operable Unit #3) for the site. The Final Remedy covers three portions of the Burnt Fly Bog Site known as the Westerly Wetlands Area, the Tar Patch Area, and the Northerly Wetlands Area. The

selected remedy requires excavation and off-site disposal of PCBs and lead contaminated soil from the Tar Patch Area and the Northerly Wetlands, with subsequent wetlands restoration. The Westerly Wetlands Area, Tar Patch Area and Northerly Wetlands Area will also be completely fenced off. A Declaration of Environmental Restriction will be imposed on the Westerly Wetlands Area and an extensive chemical and biological monitoring program will be implemented with emphasis in this area to determine the effectiveness of natural containment of residual contaminants. Funding for the design of the Final Remedy was obligated in September 1999 and NJDEP awarded a contract for the design in April 2000. The 100% remedial design for OU3 was completed in September 2002. NJDEP awarded the remedial action contract in April 2003 and the contractor mobilized in May 2003. Approximately 45,600 tons of contaminated soil were excavated and removed for off-site disposalfrom the Tar Patch Area. In addition, about 600 tons were incinerated. Approximately 4,000 tons of contaminated soil were excavated and removed for off-site disposal from the Northerly Wetlands Area. All site construction work was completed in November 2003. Wetlands restoration will begin in the Spring of 2004.

# Enforcement Status



In the early 1980's, EPA sent notice letters to Champion Chemical, Imperial Oil, and Emil Stevens. Notice letters were also sent to Dominick and Carmella Manzo and their corporation Ace-Manzo-Inc.

On behalf of EPA, the U.S. Department of Justice (DOJ) initiated a cost recovery action on January 14, 1997 against Dominick and Carmella Manzo and their corporation Ace-Manzo-Inc.



# Cleanup Progress (Threat Mitigated by Physical Cleanup Work)

All of the contaminated soil and sludge from the Uplands Area has been excavated. Nearly 85,000 tons of contaminated soil, including about 10,000 tons of stabilized sludge, have been removed and disposed of offsite at EPA-approved disposal facilities. In addition, about 1,000 tons of sludge contaminated with high levels of PCBs have been removed and incinerated off-site.

For the Interim Remedy, approximately 6,000 tons of PCBs-contaminated soil was excavated and removed from the portion of the Westerly Wetlands referred to as the Downstream Area. A sedimentation basin was completed in the Downstream Area to prevent sediment from migrating off-site into Burnt Fly Brook. These actions, in conjunction with the State's periodic removal of sediment accumulating in the basin, will mitigate the effects of the Burnt Fly Bog site on downstream potable watershed areas. Based on monitoring data obtained by the State since the sedimentation basin was completed, it appears that surface water and sediment contamination levels in Burnt Fly Brook have been significantly reduced.

In March 2001, EPA issued a Five Year Review Report which indicated that remedial actions still remain protective of public health and the environment.

# Site Repositories



Marlboro Township Municipal Building, 1979 Township Drive, Marlboro, New Jersey 07746 Monmouth County Library Court, 1 Library Court, Marlboro, New Jersey 07746